Somerset Partnership NHS
NHS Foundation Trust

# SMOKE FREE POLICY

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| Version: | 3 |
| Date Issued: | October 2017 |
| Review Date: | April 2018 |
| Applies to: | All Trust staff, patients, carers and members of partner agencies. |

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## DOCUMENT CONTROL

| Reference | Version | Status | Author |
|---|---|---|---|
| Oct17/SFP | 3 | Final | Professional Lead for Community Mental Health Nursing |

**Amendments**

v2.4 - Document reviewed and revised to reflect new Department of Health guidance and the Trust's revised approach to smoking management.
v2.5 – Minor amendments following review by Clinical Policy Review Group and addition of Smoke Free Care pathway as Appendix D.
v2.6 – Consideration given to the effects of smoking withdrawal on patients prescribed Clozapine with signposting to prescribing guidance.
V2.7 – Updated phone numbers and contact details
V2.8 – Updating change of policy title
V2.9 – Updating of text and care pathways
V2.10 – Conversion to new policy format
V2.11 – Policy Statement added
V2.12 - Removed the names from the contribution list. Updated the title of the Health, Safety, Security and Estates Group and the Regulation Governance Group is now the Quality and Performance
V2.13 End of Life Care, updating index
V2.14 Section added for prohibited items
V2.15 Review of prescribing guidelines
V2.16 Re-formatting
V2.17 Addition of images of E-Cigarettes
V2.18 Inclusion of further Community staff responsibilities, re-wording section 6.2
V2.19 Changes recommended by Operational Implementation Group s1.3, s 6.3, s 10.3, s11.5, s16.6, s16.7, appendix C Service Director added, appendix D training levels altered.
V2.20 Sections 10.2 and 16.6 altered to include CAHMS. Alteration to s 8.4.
V.2.21 Appendix F added - Nicotine Replacement Therapy for management of temporary nicotine withdrawal
V2.22 Change to appendix F section 5.2 added – or other approved means
V2.23 Appendix D Treatment pathway 1 altered to Patient smokes >10 per day
21 mg 24 hour nicotine patch
V2.24 Alteration to Appendix B – Letter template to Patient. Alterations as requested by the Trust Board to section 1 and 3
Nov 2017 – Updated name of Chief Executive on standard Letters Appendix A, B and C.

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| **Approving Body** | Clinical Governance Group | Date: August 2017 |
| **Equality Impact Assessment** | Impact Part 1 | Date: September 2017 |
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| **Review Date** | April 2018 | |

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| **Contact for Review** | Head of Mental Health Nursing |
| **Lead Director** | Director of Nursing and Patient Safety |

**CONTRIBUTION LIST Key individuals involved in developing the document**

| **Designation or Group** |
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| Somerset NHS Stop Smoking Service Manager |
| Smoke Free Group |
| Health, Safety, Security and Estates Management Group |
| Clinical Policy Review Group |
| Joint Policy Review Group |
| Clinical Governance Group |
| Senior Management Group |
| Stop Smoking Specialist Practitioner |
| Professional Lead for Community Mental Health Nursing |

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## 1. INTRODUCTION

1.1 Somerset Partnership NHS Foundation Trust is a smoke-free Trust. This policy advises staff and patients as to the position the Trust takes in respect to smoking on and in Trust premises. It also offers guidance to staff on how they can support patients and staff who may request to reduce or try to quit smoking.

1.2 Smoking is the biggest single cause of ill health and early death in the UK. The risks and harms caused by passive smoking are well established. The public health white paper *Choosing Health, Making Health Choices Easier* made a clear commitment to a smoke free NHS.

1.3 Passive or involuntary smoking has also been shown to be a hazard to health, leading to the premature death of over 1000 people each year. Those exposed to passive smoke are at increased risk of lung cancer, nasal cancer and heart disease. In addition, passive smoking can trigger or aggravate respiratory conditions such as asthma or bronchitis. It can cause coughs, headaches and irritated eyes..

1.4 This policy covers the use of tobacco, herbal cigarettes and pipes which, for the purposes of this policy, are treated the same as tobacco-based products. This also policy covers the use of electronic E-Cigarettes and vapes.

## 2. PURPOSE AND RATIONALE

2.1 This policy is intended to:

- protect and improve the health of all staff, patients, visitors, contractors and the general public;
- ensure all staff, patients, visitors and contractors to Trust premises benefit from a smoke free environment;
- protect both smokers and non-smokers from the danger to their health of exposure to passive smoke;
- set an example to other employers and workforces, particularly in health-related locations;
- encourage staff and patients to access support and advice to give up smoking through the local stop smoking service;
- encourage staff to consider using stop smoking medication products;
- encourage patients to consider using stop smoking medication; products as part of their treatment and care;
- meet the Trust's legal obligations under Health and Safety legislation;
- improve fire safety.

2.2 This policy applies to all staff whether temporary or permanent (including locum, bank, agency, volunteer and seconded staff), patients, visitors and contractors, and any other persons, who enter Trust-owned or rented

premises, buildings or grounds (including car parks, entrances and gardens) for any purpose whatsoever.

2.3 The Health and Safety at Work Act 1974 places a duty on the Trust to provide a working environment that is "safe, without risk to health, and adequate as regards facilities and arrangements for their welfare at work". The Trust also has a legal duty to its staff and patients to protect them from health hazards such as smoking.

2.4 Stopping smoking at any time has considerable health benefits for people and for those around them. For people using Trust services, there are additional advantages, including shorter hospital stays, lower drug doses, fewer complications, higher survival rates, better wound healing, decreased infections, and fewer re-admissions after surgery. Compliance with NICE guidance PH48 involves ensuring all Trust premises are smoke free and clear pathways to access support to stop smoking are in place.

2.5 Support to stop or reduce smoking is a health promotion activity, intended to fulfil the Trust's duty of care to its staff who also have a role as health educators, a part of which is to lead by example.

2.6 In addition to preventing exposure to harmful smoke, smoke-free premises and grounds create an environment which supports people trying to stop smoking and will remove triggers, which cause many to smoke or relapse into smoking.

## 3. POLICY STATEMENT

3.1 This policy is intended to ensure compliance with NICE guidance PH48, where smoking will not be permitted in the building or grounds of any Trust premises. Help will be provided to those who wish to stop or refrain from smoking.

## 4. DEFINITIONS

4.1 **Smoking:** Smoking is the inhalation of the smoke of burning tobacco encased in cigarettes, pipes, and cigars. For the purposes of this Trust policy, this includes the use of E-Cigarettes and herbal cigarettes or pipes.

4.2 **Casual smoking** is the act of smoking only occasionally, usually in a social situation or to relieve stress.

4.3 **A smoking habit** is a physical addiction to tobacco products. Many health experts now regard habitual smoking as a psychological addiction, too, and one with serious health consequences.

4.4 **Smoke Free Environment** is a place that is tobacco smoking and vape free

## 5. DUTIES AND RESPONSIBILITIES

5.1 **The Chief Executive** accountability for the policy rests ultimately with the Chief Executive.

5.2 **The Chief Operating Officer** is operationally accountable for the policy and for its implementation across the organisation.

5.3 **The Smoking Cessation Lead** is responsible for the policy and for ensuring this policy is enacted and for reporting on matters relating to smoking.

5.4 **Operational Managers** are responsible for implementing the policy and for ensuring appropriate action is taken against those in contravention of it.

5.5 **All members of staff** (including bank, locum, agency and contractors) are individually responsible for their actions and must comply with the policy.

## 6. REQUIREMENTS PLACED ON MEMBERS OF STAFF BY THIS POLICY

6.1 Smoking and the use of E-Cigarettes or vaping by staff is not allowed within any of the following:

- Trust-owned or rented premises or outer grounds;
- lease and personal cars parked or driven in the grounds of the above;
- in lease or personal cars whilst on Trust business;
- anywhere staff can be identified as Trust employees;
- premises owned by another organisation within which Trust staff are based;
- any patient's home or residence.

6.2 In line with their duty to promote good health, staff will not be permitted to smoke, use E-Cigarettes, vape or roll tobacco during paid working time, wherever they may be at the time. Staff must not smoke whilst wearing a Trust uniform/Mufti, identity badge at any time or within line of sight of any Trust premises

6.3 Staff may not smoke or use E-Cigarettes or vape in the presence of patients or purchase cigarettes, tobacco or smoking paraphernalia on behalf of a patient at any time.

6.4 If members of staff wish to leave Trust premises to smoke during their unpaid breaks, the following will apply:

- Under the Working Time Regulations (1998, as amended), where staff work for longer than six hours they are entitled to an unpaid break of a minimum of 20 minutes. All staff should be encouraged to take a break. Staff are not entitled to any

additional breaks over and above their entitlement under the Working Time Regulations;
- Ensure that all cigarettes are disposed of in an appropriate manner.

6.5 Members of staff may not smoke, use E-Cigarettes, vape or roll tobacco on or around Trust premises during their unpaid break wearing a Trust uniform/Mufti or identity badge at any time.

6.6 Members of staff must take their unpaid breaks in a manner consistent with maintaining necessary staffing levels and avoiding risk. Managers and staff therefore need to plan effectively for staff leaving the premises on breaks for any reason. Local procedures will be in place to ensure managers are made aware who is on or off the premises.

6.7 Job advertisements will include reference to this policy and will indicate adherence is contractual.

## 7. SUPPORT TO STAFF

7.1 As a responsible NHS employer, the Trust is committed to supporting members of staff who wish to stop smoking/reduce the amount they smoke/manage their smoking whilst at work. Confidential advice on stop smoking services is available from:

- Local stop smoking service
- Some General Medical Practices and some Pharmacies

7.2 Members of staff who smoke will be offered a referral to the local stop smoking service or to a trained Stop Smoking Practitioner in their department as a supportive measure.

7.3 Any member of staff wishing to stop smoking/reduce the amount they smoke/manage their smoking during working hours is strongly advised to discuss with their manager how to access these services.

7.4 Staff wishing to engage in smoking cessation should refer themselves to the local stop smoking service which they should try to arrange outside of working hours, however if this is not possible, reasonable time off to attend stop smoking service must be discussed and agreed with the manager prior to attending to ensure the safe provision of services.

7.5 If staff do not wish to discuss such matters with their manager they are free to make direct contact with the local stop smoking service

## 8. STAFF COMPLIANCE WITH THE POLICY

8.1 If a member of staff is found to have breached the Smoke Free Policy, the manager should:

- bring the requirements of the policy, and their responsibilities under it, to their attention;
- provide an opportunity to discuss the reasons why they did not comply with the policy;
- check that they have been offered relevant support and access to stop smoking advice;
- follow this up in writing by using the template letter to staff, Appendix A.

8.2 If members of staff assert they have a right to smoke, the manager should remind them that:

- this is a Trust policy relating to health and safety and is based on the same principles as policies relating, for example, to dangerous machinery or toxic substances;
- an employee cannot challenge the Trust's right to introduce safe, healthy working practices;
- recent UK case law has demonstrated smoking is not considered a right under the provisions and articles of the Human Rights Act.

8.3 By adopting a supportive approach within the Trust, it is hoped members of staff will either choose to participate in a stop smoking programme or, alternatively, if they wish to continue to smoke, they will make the necessary lifestyle changes to enable them to work in a manner that is compliant with the policy. Trained Stop Smoking Practitioners can advise staff on how to manage their smoking during their working day.

8.4 For members of staff who do not comply with the policy once the above steps have been taken, the breach of this policy should be dealt with by the Line Manager in accordance with the Trust's Disciplinary Policy and Procedure. The Line Manager should seek advice from an HR Advisor concerning the fair and consistent application of the policy including the provision of reasonable support.

## 9. REQUIREMENTS RELATING TO PATIENTS

9.1 No patient is permitted to smoke tobacco or herbal products on Trust premises.

9.2 Patients are to be advised of the Trust policy with regard to smoking, particularly prior to admission (see appendix D – Smoke Free Care Pathway).

9.3 Patients who smoke who are admitted to a community hospital or mental health in-patient ward will be informed that the hospital is a smoke-free site within 30 minutes of admission. They will be given the Trust Smoke Free Leaflet which describes the support available to them on admission if the patient has not already accessed support prior to admission. This will include support to:

- stop smoking completely
- abstain from smoking whilst in hospital

9.4 Patients who visit day hospital and community services provided by the Trust will not be allowed to smoke whilst on Trust premises or whilst participating in a community programme.

9.5 Members of staff have the right to request that patients in the community do not smoke during their visits. If patients are unable to comply with this request, alternative arrangements may have to be sought.

9.6 If members of staff have any concerns regarding the dangers of passive smoke encountered during the course of their duties, they should discuss the matter with their line manager in the first instance.

9.7 Trust leaflets outlining this policy and aimed at both staff and patients are available on all wards and community team buildings.

9.8 Where a patient refuses to co-operate with the policy, the matron or ward manager will write to the individual using the Template letter to Patients (Appendix B) enclosing stop smoking literature. If the patient still persists in smoking, the matron or ward manager will reserve the right to contact the local Environmental Health Officer and request that they visit the individual to explain the law and the possible consequences (such as fixed penalty fines).

## 10. PROHIBITED ITEMS

10.1 Inpatient wards are designed to provide a safe and secure environment for patients, staff and visitors to the ward. To maintain this level of safety and security it is important to monitor all potentially harmful items coming on to the ward and to ensure that these are stored appropriately.

10.2 In line with the Trust policy on going Smoke Free all tobacco products, re-chargeable and re-fillable e-cigarettes, lighters and matches will be classed as prohibited items with effect from the 1 January 2018. In the Children and Adolescent Mental Health Inpatient Services all e-cigarettes will be dealt with as prohibited items.

10.3 Patients being admitted to the ward will have these items removed. These items will be treated as personal possessions and will be securely stored in line with the Property – Inpatient Property Management Policy and returned to the patient upon discharge or authorised leave from the ward.

10.4 Where items are found following a search of a patient then staff should follow the procedure as set out in the Search of Patients, Visitors and Property policy for the removal and storage of these items.

## 11. ASSESSMENT AND PROVISION OF STOP SMOKING ADVICE IN COMMUNITY HOSPITAL AND MENTAL HEALTH INPATIENT WARDS

11.1 On admission to all services including community and in-patient wards, the physical health care needs of patients are assessed and addressed through the care planning process (see appropriate Smoke Free Care Pathway Appendix D). Initial assessments must determine whether a patient is a smoker, note their level of use and their smoking history, and any support previously accessed. The assessment must be completed within 30 minutes of initial admission and access to NRT made available

11.2 If a patient is a smoker, brief advice about stopping smoking should be given, or, as an alternative, brief advice on the management of their smoking whilst they are in hospital. They should be advised about the support available from the Stop Smoking Service or from the Stop Smoking Practitioner based on the ward (see appropriate Smoke Free Care Pathway Appendix D). Newly admitted patients may not be able to respond to stop smoking interventions and therefore, ward staff should address this issue at a more appropriate time. Each patient should be regularly reviewed and offered support to stop or temporarily abstain from smoking. Any advice given to a patient must be relayed in a sensitive manner.

11.3 Apart from the Trust's requirements not to smoke on its premises, the patient themselves must decide whether to attempt to quit smoking altogether. If the patient decides to make an attempt to stop smoking or receive support to abstain from smoking during their hospital stay, a stop smoking plan should be put in place as part of their care plan and will be overseen by the trained Stop Smoking Practitioner on the ward

11.4 Smoking may affect certain mental health prescribed medications and stopping smoking may result in the need to review drug levels. Any attempt to stop smoking must be monitored in order to identify any medication side effects, whether any adjustments to medication need to be made, or if the patient requires further help with withdrawal symptoms and the urge to smoke. For specific advice on interactions between smoking and medications, staff should refer to the prescribing guidelines (see Appendix E) or contact the Medicines Management Team

11.5 If the patient does not wish to receive support to abstain from smoking, despite not being allowed to smoke on the ward, there should be evidence in their clinical records to show stop smoking support has been fully considered

and offered by the ward team and recorded in the patient's assessment and progress notes. If they feel that they may make a quit attempt in the future, the patient should be encouraged to approach staff for support and advice

11.6 The patient's decision should be revisited during the course of their care by the ward team when it is clinically appropriate to do so.

11.7 The discharge planning process will also include the offer of help to stop smoking as above and documented. Patients will be signposted or referred to The local Stop Smoking Service.

## 12. ASSESSMENT AND PROVISION OF STOP SMOKING ADVICE IN COMMUNITY SETTINGS

12.1 Community staff have an important role to play in the management of tobacco dependence before and after a smoker is admitted to hospital and during their episode of community treatment, whether their contact is brief or longer term**.**

12.2 Clinical Staff working in community settings will ask and record in RIO each patients smoking status at the first contact and provide very brief advice to all smokers.

12.3 Confirming if someone is a smoker, should be followed up with advice on the most effective way of quitting. Offering support to quit rather than asking a smoker how interested they are in stopping or telling a person they should stop, leads to more people making a quit attempt.

12.3 All patients who wish to quit will be referred to the local Stop Smoking Service.

12.4 Staff will actively engage patients, their family and carers about the benefits of quitting and will do so until point of discharge.

12.5 If admission to an inpatient facility is possible, clinical community staff, at the earliest opportunity, should be advising patients of the Smoke Free status of wards and identifying interventions that may be helpful in respect to reducing their smoking prior to admission.

## 13. END OF LIFE CARE

13.1 **For patients who are dying and no longer safely able to smoke:** please utilise the protocol for nicotine replacement if patient has been smoking in the last days. Please use their previous normal daily smoking amount to calculate the patch strength needed, this may be different to current use when gravely ill.

13.2 **For those who wish to continue smoking and are in the last days of life**: Although the Trust is smoke free, the continuation of enjoyment for those who are dying is important. A pragmatic approach is encouraged. This pragmatism should ensure the safety of the smoker, the people around them

and property/buildings. The following points are of note for those who are in the last days of life:

- Smoking will need to take place outside and in an agreed area with the ward team. Dispensation can be made **only** for the patient to is thought to be dying (not friends or others);
- A patient who can be supported to safely smoke by relatives or friends may also require fire-proof blankets. Non-ignitable clothes (such as cotton rather than polyester) should be considered by the patient. An assessment of fire risk should be made;
- If a patient needs staff escort to smoke this will need to fit in with the staffing and priorities of the ward team;
  If the patient is unable to safely smoke nicotine replacement should be considered as per the trust protocol.

## 14. VISITORS AND CONTRACTORS

14.1 In line with this policy, visitors and contractors will not be allowed to smoke, use E-Cigarettes, vape or roll tobacco on, or in Trust premises, buildings or grounds.

14.2 Somerset Partnership staff will be supported and encouraged to approach visitors and make them aware of this Trust Policy

14.3 Prior to the start of work by contractors on Trust premises, the agreed contract will state the Trust's Smoke Free policy.

14.4 Patients will be notified that their visitors will not be allowed to smoke or use E-Cigarettes or vape whilst on Trust premises.

14.5 Visitors or contractors who continue to smoke on Trust premises having been asked to refrain from doing so will be sent a letter (see Appendix C)

## 15. ADVICE AND SUPPORT

15.1 The Trust will provide advice and support for members of staff and patients including:

- referrals to the local stop smoking service
- providing self-help information and publications via the Trust's Intranet and Internet websites;
- training members of staff in very brief advice and referral to the local stop smoking service to enhance staff skills of engaging and referring smokers;.
- training key members of staff as Stop Smoking Practitioners to deliver an in- house stop smoking service to staff and patients where required;
- appropriate stop smoking medication will be made available for patients.

## 16. ELECTRONIC CIGARETTES (E-Cigarettes and Vapes)

16.1 E-Cigarettes are battery powered devices that deliver nicotine via inhaled vapour. Unlike normal cigarettes, there is no burning of tobacco involved in E-Cigarettes so there is no smoke or other harmful products of combustion, such as tar and carbon monoxide. Although E-Cigarettes are not completely risk free, experts agree that they are substantially less harmful than smoking. (Ref: Electronic cigarettes: A briefing for stop smoking services, NCSCT, January 2016).

16.2 Best estimates show E-Cigarettes are 95% less harmful to health than normal cigarettes, and when supported by a smoking cessation service, help most smokers to quit tobacco altogether (Ref: E-Cigarettes: an evidence update, A report commissioned by Public Health England, August 2015)

16.3 The estimate that E-Cigarette use is around 95% safer than smoking is based on the facts that:

- the constituents of cigarette smoke that harm health – including carcinogens – are either absent in E-Cigarette vapour or, if present, they are mostly at levels much below 5% of smoking doses (mostly below 1% and far below safety limits for occupational exposure);
- the main chemicals present in E-Cigarettes only have not been associated with any serious risk.

16.4 E-Cigarettes may therefore support compliance with the Smoke free Policy and help smokers manage their nicotine dependence. It is important that E-Cigarettes do not simply replace cigarettes so that the culture of E-Cigarettes replaces the smoking culture.

16.5 All patients should be encouraged to use licensed nicotine replacement therapy (NRT) in the first instance, however some patients may prefer to use E-Cigarettes.

16.6 In cases where a patient is admitted and does not have resources to continue using their own e-cigarette or declines to use NRT, Somerset Partnership will provide a maximum of 3 E-Cigarettes during any one admission to facilitate abstinence from tobacco. This will be at the Managers or Nurse in Charges discretion. E-Cigarettes will not be issued in the Children and Adolescent Mental Health Inpatient services as it is illegal to purchase and supply e-cigarettes and tobacco to people under the age of 18 years.

16.7 Staff may only purchase appropriate E-Cigarettes on behalf of patients, funding of these products is at the patient's expense and not from petty cash. If the patient does not have the finances to support their use of E-Cigarettes, strong consideration should be given to the use of NRT.

16.8 It may be suitable for E-Cigarettes to be supplied by the patient's family or friends, but these will need to be assessed by staff to ensure they conform to the requirements for approved devices.

16.9 The sale of E-Cigarettes to under- 18s and the purchase by adults on behalf of under-18s is illegal

**Approved Devices**

16.10 Disposable, non- rechargeable, non-refillable E-Cigarettes / Vapes. Please refer to the patient information leaflet – Guidance on use of E-Cigarettes.

**Disposable: Allowed**

**Re-chargeable tank models (refillable) NOT Allowed**

**Use of E-Cigarettes**

16.11 E-Cigarettes may be used by patients in designated outside areas only. Use is not permitted in bedrooms or indoor communal areas.

16.12 Staff will not be permitted to smoke or use E-Cigarettes during paid working time, including paid breaks, wherever they may be at the time.

## 17. COMMUNICATION

17.1 The Trust's promotional, marketing and recruitment materials will contain information that the Trust is smoke-free.

17.2 Staff will be briefed at both corporate and local induction on the purposes and operation of the policy.

17.3 Staff will be given information on the available stop smoking services for staff and patients.

17.4 The Trust will maintain Intranet and Internet websites on stop smoking and where to get help to quit.

17.5 The Trust will provide and maintain signs in a variety of suitable formats on its premises to state smoking is not permitted under this policy. No smoking signs will also be provided in Trust lease and fleet cars.

## 18. MONITORING COMPLIANCE AND EFFECTIVENESS

18.1 The smoking status of patients will be recorded on RiO (electronic patient record) or equivalent system and managed through the Trust's balanced scorecard process.

18.2 The Trust will monitor the number of patients who smoke who are provided with stop smoking advice and support.

18.3 The Quality and Performance Committee will be responsible for overseeing the monitoring of the policy. The Health, Safety, Security and Estates Management Group will monitor incidents and raise any significant risk issues within their Quarter report to the Quality and Performance Committee.

18.4 Incidents of non-compliance by either staff or patients are a reportable untoward event and should be recorded on DATIX, and monitored accordingly.

## 19. TRAINING AND COMPETENCY REQUIREMENTS

19.1 All clinical staff will be required to undertake the essential on-line training in Very Brief Advice and Referral (VBA Level 1)) to enhance skills in engaging and referring smokers to stop smoking services.

19.2 Registered nursing staff will be trained to Level 2 for the administration of NRT without medical advice as per the Nicotine Replacement Therapy for management of temporary nicotine withdrawal (Appendix F)

19.3 Key staff will be trained as Level 3 Stop Smoking Practitioners to deliver an in-house stop smoking service where appropriate.

## 20. REFERENCES, ACKNOWLEDGEMENTS AND ASSOCIATED DOCUMENTS

### 20.1 References

Choosing Health, Making Healthy Choices Easier, Department of Health 2004

Department of Health National Service Framework for Mental Health: Department of Health 1999

Tackling Smoking; Policy on Smoking in the Workplace – Avon Health Authority 2001

Smoking and Mental Health – Dr Ann McNeill 2001

Tobacco – harm reduction approaches to smoking. NICE National Institute for Health and Care Excellence. June 2013

Stop Smoking Interventions in Secondary Care: National Centre for Smoking Cessation and Training on behalf of the Department of Health 2011

The Francis Report - http://www.midstaffspublicinquiry.com/report

20.2 **Cross reference to other procedural documents**

Guidelines for use of stop smoking medications for inpatients in community hospitals and mental health inpatient wards. (Medicines Management Group. April 2013)

Health and Safety Policy

Risk Management Policy and Procedure

Untoward Event Reporting Policy and procedure

Medicines Policy

All current policies and procedures are accessible in the policy section of the public website (on the home page, click on 'Policies and Procedures'). Trust Guidance is accessible to staff on the Trust Intranet.

## 21. APPENDICES

21.1 For the avoidance of any doubt the appendices in this policy are to constitute part of the body of this policy and shall be treated as such.

| | |
|---|---|
| Appendix A | Template letter to Staff |
| Appendix B | Template letter to Patient |
| Appendix C | Template letter to Visitors and Contractors |
| Appendix D | Smoke Free Care Pathway |
| Appendix E | Guidelines for use of Stop Smoking Medications for Inpatients and General Drug Interactions with Smoking |
| Appendix F | Nicotine Replacement Therapy for management of temporary nicotine withdrawal |

Template – Letter to Staff

Somerset Partnership NHS
NHS Foundation Trust

*Our Ref: Enter your ref here*

*Your Ref: Enter their ref here*

Date (Format: 13 May 2013)

Service building address to be entered here
Address 1
Address 2
Town
County
Postcode
Tel: Enter your number here
Fax: Enter your number here
Email: firstname.surname@sompar.nhs.uk

www.sompar.nhs.uk

Name
Address 1
Address 2
Town
County
Postcode

Dear (**NAME OF STAFF MEMBER)**

I am writing to confirm the content of our meeting on …… …..at ……..

I met with you to discuss the issue of smoking on …….. site and the fact that you have been observed smoking in contravention of the Trust's Smoke Free Policy.

I explained to you that smoking on site or when identifiable as a Trust employee is contrary to the policy, approved by the Trust Board and available on the Trust Intranet site, to which all staff are expected to adhere. I highlighted to you the availability of support and stop smoking medication products for staff who wish to stop or reduce their smoking.

Finally, I advised you that continued failure to comply with this policy could result in disciplinary action being taken.

If you have any further queries with regards to this matter, please do not hesitate to discuss them with me.

Yours sincerely

**Line Manager**

**Cc Service Director**

Somerset Partnership

Template – Letter to Patient

Somerset Partnership NHS
NHS Foundation Trust

*Our Ref: Enter your ref here*

*Your Ref: Enter their ref here*

Date (Format: 13 May 2013)

Service building address to be entered here
Address 1
Address 2
Town
County
Postcode
Tel: Enter your number here
Fax: Enter your number here
Email: firstname.surname@sompar.nhs.uk

www.sompar.nhs.uk

Name
Address 1
Address 2
Town
County
Postcode

Dear **(NAME OF PATIENT)**

I am writing to follow up a conversation that ward staff have had with you about smoking on Trust premises.

We have a policy in place to prevent harm to individuals from smoking and to prevent exposure for others to harmful smoke and to create a smoke-free environment which supports people trying to stop or refrain from smoking.

Despite our reminders you have continued to ignore staff and trust policy and continued to smoke. You are now formally asked to cease smoking on Trust premises and to discuss with a Stop Smoking Practitioner on the ward how you can be helped with this.

Support to stop or refrain from smoking whilst in hospital is available from trained stop smoking staff working on the ward and we would ask that you make use of this help.

Thank you for your cooperation in this matter

Yours sincerely

**Ward Manager/Matron**

Cc Service Director

Chairman: Stephen Ladyman

Chief Executive: Peter Lewis

Somerset Partnership

Template – Letter to Visitor/Contractor

Somerset Partnership NHS
NHS Foundation Trust

*Our Ref: Enter your ref here*

*Your Ref: Enter their ref here*

Date (Format: 13 May 2013)

Service building address to be entered here
Address 1
Address 2
Town
County
Postcode
Tel: Enter your number here
Fax: Enter your number here
Email: firstname.surname@sompar.nhs.uk

www.sompar.nhs.uk

Name
Address 1
Address 2
Town
County
Postcode

**Dear (NAME OF VISITOR OR CONTRACTOR)**

I am writing to follow up a conversation about your smoking on Trust premises.

The Somerset Partnership NHS Foundation Trust Smoke Free Policy is very clear that:

*No one is permitted to smoke on Trust premises under any circumstances.*

The policy is in place to prevent exposure to harmful smoke, create a smoke-free environment which supports people trying to stop smoking and remove triggers which cause many to smoke or relapse into smoking.

If you continue to ignore this request not to smoke on Trust premises I will, in line with Trust policy, contact the local Environmental Health Department who may take further steps to stop this behaviour. They have the power to issue a fixed penalty notice.

We hope you appreciate that the policy is enforced to protect and improve the health of staff, patients, visitors, contractors and the general public.

If you wish support to stop smoking, please contact the Local Stop Smoking Service.

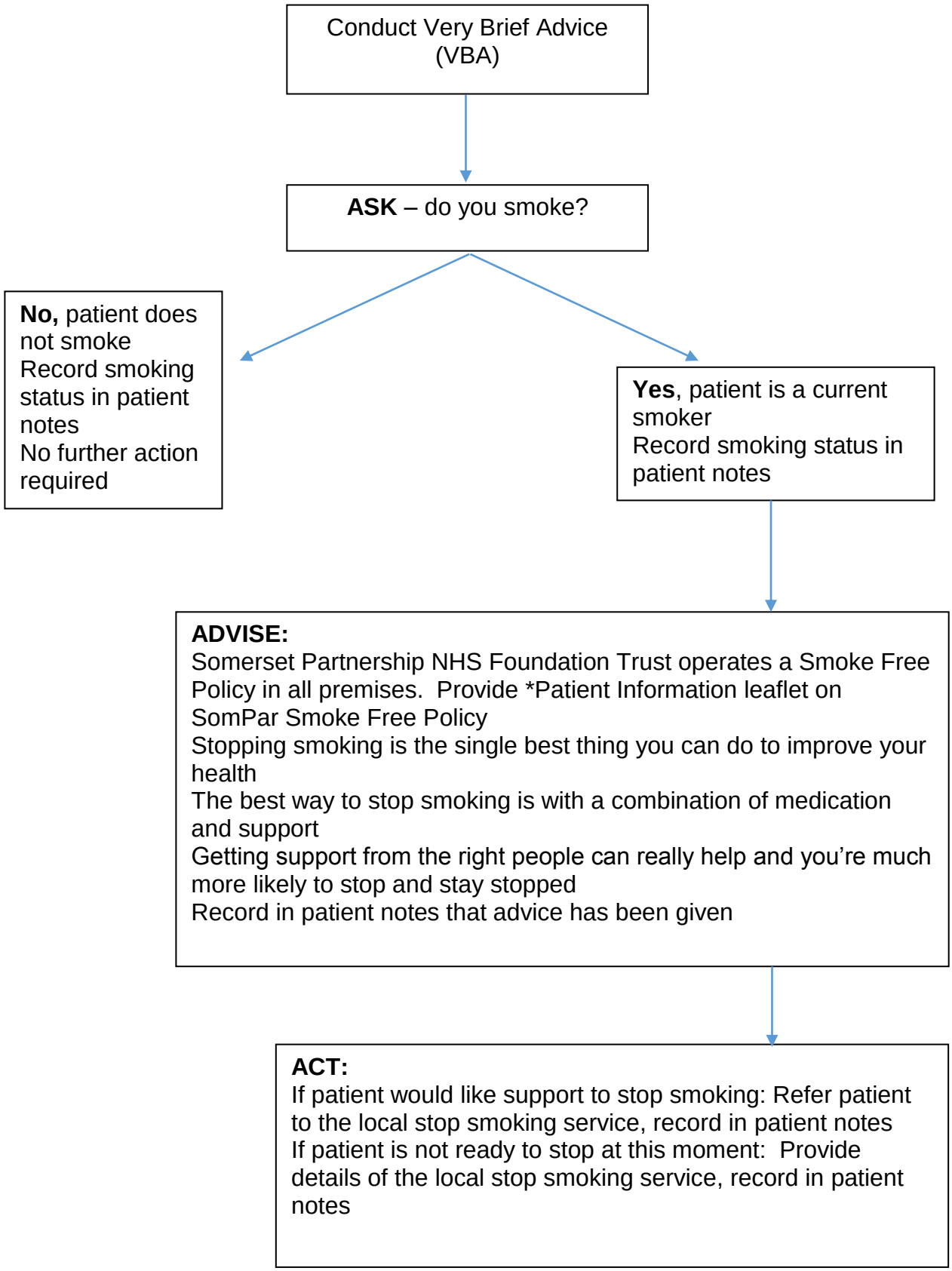
Thank you for your cooperation in this matter.

Yours sincerely

**Ward Manager/Matron**

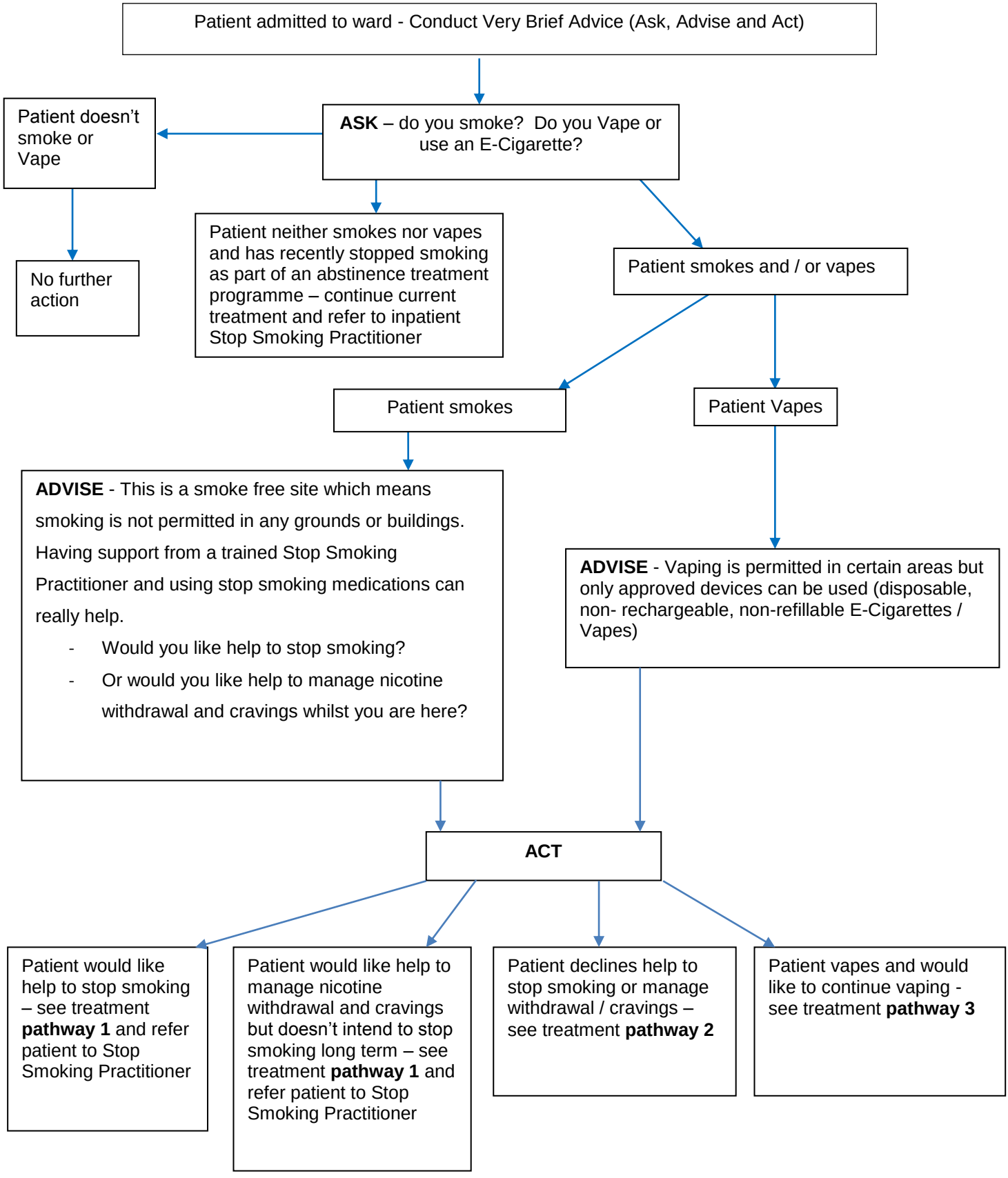
Cc Service Director

**SMOKEFREE CARE PATHWAY FOR COMMUNITY OUTPATIENTS**
This pathway should be delivered by VBA (Level1) trained staff.



## SMOKEFREE CARE PATHWAY FOR INPATIENTS

This pathway should be delivered by Level 2 trained staff.

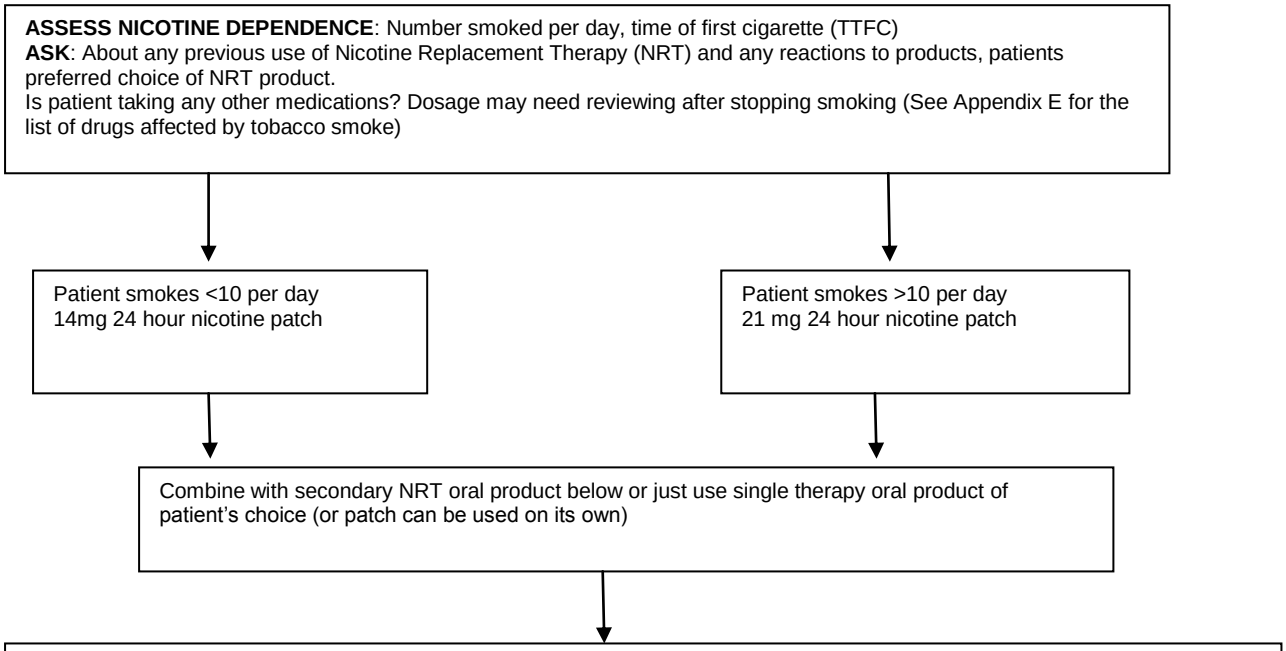


**TREATMENT PATHWAY 1: FOR PATIENTS WHO WOULD LIKE TO STOP SMOKING OR WOULD LIKE HELP TO MANAGE NICOTINE WITHDRAWAL AND CRAVINGS**

This pathway should be delivered by Intermediate level trained staff.

**Nicotine replacement must be offered within 30 minutes of admission**

*The stop smoking medications described below are accessed through the NRT Enabling Guideline.(Appendix F)




**NiQuitin CQ Clear Transdermal patch – dose** 21mg, 14mg Patches (24 hour patches)
**Administration**: 1 patch per day. Remove from backing paper and hold exposed to air for a few seconds. Apply to dry, hair-free skin and hold in place for 20 seconds. Remove patch before applying a fresh patch daily. Apply to different site each day. Do not re-use the site for 7 days. Do not apply to broken or inflamed skin.

**Nicorette 2mg Mint Gum – dose**: use one piece every 1 -2 hours or when strong cravings occur. Max 15/day. **Administration**: 1 piece of gum should be chewed briefly and then parked for a few minutes between the gum and cheek. Chew to refresh and park again. Nicotine is absorbed through the lining of the mouth. Discard after 20 minutes.

**Nicorette 2mg Cools Lozenge – dose:** Use one lozenge every 1 – 2 hours or when strong cravings occur. Max 15/day. **Administration**: Allow lozenge to dissolve in the mouth. From time to time move the lozenge from one side of the mouth to the other. Do not chew or swallow. Nicotine is absorbed through the lining of the mouth. Lozenge will dissolve in 15 minutes.

**Nicorette Inhalator 15mg cartridge – dose:** Use 3 – 6 cartridges per day. Max 6 cartridges/day. **Administration** : Each cartridge provides for 40 minutes intense use ideally in 5 – 10 minute periods. Nicotine is absorbed through the lining of the mouth not via the lungs. The amount of nicotine from one puff on the cartridge is less than that from a cigarette so more regular puffs/use may be needed.

**Nicorette Quickmist 1mg oral mouth spray** (*faster onset of action compared with other nicotine products)* **Dose:** 1 – 2 sprays every 30 – 60 minutes (up to 4 sprays/hour) when the urge to smoke occurs or to prevent cravings. Max 64 sprays/day.
**Administration:** Prime the spray before first use. Release spray into the mouth, avoiding the lips. Do not inhale while spraying. Avoid swallowing for a few seconds after spraying.

**COMMON CONTRAINDICATIONS:** Hypersensitivity to any of the components of the product. All NRT products are contraindicated for children under the age of 12 years.
Special precautions: *Underlying cardiovascular disease*: In stable cardiovascular disease the use of NRT presents a lesser hazard than continuing to smoke. If the condition is unstable or worsening the patient should be encouraged to stop smoking with non-pharmacological interventions. If this fails, NRT may be considered.

**TREATMENT PATHWAY 2: FOR PATIENTS WHO DECLINE HELP TO STOP SMOKING OR MANAGE WITHDRAWAL / CRAVINGS**

This pathway should be delivered by Level 2 trained staff.

**ASSESS NICOTINE DEPENDENCE:** Number smoked per day**,** Time to first cigarette (TTFC)

**ASK:** Is patient taking any other medications? (Dosage may need reviewing after stopping smoking see Appendix E)

↓

**Provide education and raise awareness:**

Reinforce that this is a smoke free site which means smoking is not permitted in any grounds or buildings.

Most smokers will experience unpleasant effects on their mood and physical wellbeing after they stop smoking and this will contribute to their strong desire to smoke. Withdrawal symptoms include: depressed mood, irritability, restlessness, difficulty concentrating, increased appetite, cough, constipation, mouth ulcers.

Withdrawal symptoms last for a few weeks but can be greatly reduced by using stop smoking medications and these can be issued should the patient change their mind.

Cravings to smoke are also triggered by habit and routine. Taking up new activities and distractions can help reduce the 'urge' to smoke.

↓

**Daily assessment:**

Assess nicotine withdrawal symptoms experienced and the impact these may have on mental health symptoms and well being

Assess any cigarette use

Manage any occurrence of smoking in building and grounds

↓

Repeat education and regularly offer support and referral to the Stop Smoking Practitioner

If patient agrees to receiving support, use **pathway 1** and refer to the Stop Smoking Practitioner

**TREATMENT PATHWAY 3: FOR PATIENTS WHO ARE CURRENTLY USING AN E-CIGARETTE AND WISH TO CONTINUE TO DO SO, AND FOR PATIENTS WHO CHOOSE TO USE AN APPROVED E-CIGARETTE TO SUPPORT ABSTINENCE FROM TOBACCO SMOKING**

This pathway should be delivered by Level 2 trained staff.

E-Cigarettes are battery powered devices that deliver nicotine via inhaled vapour. Unlike normal cigarettes, there is no burning of tobacco involved in E-Cigarettes so there is no smoke or other harmful products of combustion, such as tar and carbon monoxide. Although E-Cigarettes are not completely risk free, experts agree that they are substantially less harmful than smoking. (Ref: Electronic cigarettes: A briefing for stop smoking services, NCSCT, January 2016).
Best estimates show E-Cigarettes are 95% less harmful to health than normal cigarettes, and when supported by a smoking cessation service, help most smokers to quit tobacco altogether
The estimate that e-cigarette use is around 95% safer than smoking is based on the facts that:

- the constituents of cigarette smoke that harm health – including carcinogens – are either absent in e-cigarette vapour or, if present, they are mostly at levels much below 5% of smoking doses (mostly below 1% and far below safety limits for occupational exposure)
- the main chemicals present in E-Cigarettes have not been associated with any serious risk

E-Cigarettes may therefore support compliance with the Smoke free Policy and help smokers manage their nicotine dependence. It is important that E-Cigarettes do not simply replace cigarettes so that the culture of E-Cigarettes replaces the smoking culture.

In cases where a patient is admitted and does not have resources to continue using their own e-cigarette or declines to use NRT, Somerset Partnership will provide a maximum of 3 E-Cigarettes during any one admission to facilitate abstinence from tobacco. This will be at the Trusts discretion.

Staff may only purchase appropriate E-Cigarettes on behalf of patients and funding of these products is at the patient's expense. If the patient does not have the finances to support their use of E-Cigarettes, strong consideration should be given to the use of NRT.

It may be suitable for E-Cigarettes to be supplied by the patient's family or friends, but these will need to be assessed by staff to ensure they conform to the requirements for approved devices.
The sale of E-Cigarettes to under- 18s and the purchase by adults on behalf of under-18s is prohibited.

**Approved Devices**

Disposable, non-rechargeable, non-refillable E-Cigarettes / Vapes.
Please refer to the patient information leaflet – Guidance on use of E-Cigarettes.

**Use of E-Cigarettes**

E-Cigarettes may be used by patients in designated outside areas only. Use is not permitted in bedrooms or indoor communal areas.

**TREATMENT PATHWAY FOR INTENSIVE SUPPORT FROM LEVEL 3 TRAINED STOP SMOKING PRACTITIONER – SUPPORT TO STOP SMOKING**

**INITIAL SESSION**

Inform the patient about the treatment programme – regular ongoing support to change smoking behaviour, use of stop smoking medications, Carbon Monoxide breath tests

Assess current smoking and nicotine dependence

Assess past quit attempts and previous use of stop smoking medications including any reactions to products

Address the issue of the client's smoking contacts and how the client can get support to help abstain from smoking

For those receiving support to stop rather than temporary abstinence, emphasise the importance of 'not a puff'

Advise on changing routines, breaking habits, reducing the impulse to smoke

Explain & conduct carbon monoxide (CO) monitoring and record

Inform the patient about nicotine withdrawal symptoms

Discuss stop smoking medications – dose and use, and arrange supply of appropriate stop smoking medication according to suitability and patient choice

Is patient taking other medication that may need to be reviewed after stopping smoking? Inform prescriber

Summarise the plan and confirm understanding



**FOLLOW-UP SESSIONS**

Assess patient's progress

Measure carbon monoxide (CO) and record

Check stop smoking medication – that it is being used correctly, any reactions, any changes needed to product or dose

Discuss any withdrawal symptoms and cravings/urges to smoke that the client has experienced and how they dealt with them

Discuss any difficult situations experienced and methods of coping

Address any potential high risk situations coming up

For those receiving support to stop rather than temporary abstinence, reaffirm the importance of the 'not a puff' rule

Arrange supply of stop smoking medication

Summarise and agree plan



**PATIENT DISCHARGE**

Provide 1 weeks supply of current stop smoking medicationRefer to local stop smoking service for follow-up and ongoing support if required

# GUIDELINES FOR USE OF STOP SMOKING MEDICATIONS FOR INPATIENTS AND GENERAL DRUG INTERACTIONS WITH SMOKING

## INTRODUCTION

The aim of these guidelines is to encourage safe and effective use of stop smoking medications by inpatient smokers.

There is evidence that using licensed stop smoking medications increases quit rates 2 fold regardless of setting or intensity of additional support. Stop smoking medications are also recommended in the management of nicotine withdrawal during temporary abstinence from smoking tobacco. Adherence to use of licensed stop smoking medications has been associated with better outcomes. Underuse, incorrect use and stopping treatment too early undermine effectiveness.

It is considered safer to use licensed nicotine-containing products (Nicotine replacement Therapy, NRT) than to smoke tobacco. Any risks associated with NRT are substantially outweighed by the well-established dangers of continued smoking. NICE (PH45 2013) recommend the use of NRT during periods of temporary abstinence such as inpatient stays or when reducing cigarette intake. NRT can be prescribed for up to 9 months if patients show evidence of a continued need for NRT beyond the initial 8 to 12 week treatment phase. NRT was found to be safe to use for at least 5 years (Murray et al 1996, 2009)

## INPATIENT ADMISSION

Staff responsible for inpatient admissions will be trained to an Intermediate level of stop smoking intervention and support.

The current smoking status of all patients will be routinely assessed on admission and recorded see Smoke Free Policy).

All patients assessed as smokers will be offered stop smoking medications to ease nicotine withdrawal symptoms. Patients will be asked if they would like to take this opportunity to stop smoking for good, or if they would like support to abstain from smoking during their inpatient stay (see Smoke Free Care pathways). Intermediate level trained staff will be responsible for the administration of appropriate stop smoking medications. Patients who express an interest in receiving support to quit smoking or to manage their nicotine dependence will then be referred to an Stop Smoking Practitioner on the ward.

## ADVICE TO PATIENTS

Advice to those who wish to use stop smoking medications to assist a quit attempt or to manage nicotine withdrawal should include product specific advice plus the following general advice:

- How to use stop smoking medications correctly
- Possible side effects of stop smoking medications and how to manage them
- How long to use the products for and dosage
- The importance of adherence to treatment
- Nicotine withdrawal symptoms
- Possible physiological changes resulting from stopping smoking.
- A dose reduction of other medications may be necessary soon after smoking cessation / temporary abstinence (see Table 1 below detailing drug interactions with smoking).
- The effects of smoking tobacco whilst using stop smoking medicationsFollow up and how to obtain further supplies of stop smoking medications.
- Access to support material such as self-help leaflets, websites and phone apps.

### Nicotine Replacement Therapy (NRT)

Therapeutic indications: NRT products relieve and/or prevent craving and nicotine withdrawal symptoms associated with tobacco dependence. They are indicated to aid smokers wishing to quit or reduce prior to quitting, to assist smokers who are unwilling or unable to smoke, and as a safer alternative to smoking for smokers and those around them. Research has shown that dual therapy is more effective (use of a nicotine patch and secondary, faster acting oral NRT product).

All forms of NRT can be used by smokers aged 12 and over. Those prescribing or supplying NRT should check that the young person is dependent enough to warrant use of NRT.

*Pregnancy:* NRT can be used by pregnant smokers. Ideally, smoking cessation in pregnancy should be achieved without NRT. However if the mother cannot (or is unlikely to quit without NRT support), NRT is recommended as the risk to the unborn baby is far lower compared to continuing to smoke. Those prescribing or supplying NRT should ensure that the potential risks and benefits are understood by the mother. The 24-hour patch should be taken off at night.

*Cardiovascular disease:* NRT is safe in patients with stable cardiovascular disease. [13] Smokers currently hospitalised for a myocardial infarction, severe dysrhythmia (irregular heartbeat) or stroke *and* who are haemodynamically unstable (e.g. have a very low blood pressure), should initially be encouraged to quit without NRT. They should then be offered NRT under medical supervision. There is moderate evidence that NRT is safe in patients with unstable cardiovascular disease.

*Diabetes:* Smoking increases the risk for developing type 2 diabetes and is associated with complications of type 1 and type 2. Nicotine increases the release of catecholamines (e.g. adrenaline and noradrenaline), which can affect carbohydrate metabolism. Glucose levels should be monitored more closely in smokers and people using NRT.

*Gastrointestinal disease:* Swallowed nicotine (e.g. from gum or lozenges) may exacerbate oesophagitis, gastritis or peptic ulcers, therefore oral NRT preparations should be used with caution in these conditions.

*Renal or hepatic impairment:* NRT should be used with caution in patients with moderate to severe hepatic impairment and/or severe renal impairment as the clearance of nicotine and its metabolites may be decreased with the potential for increased adverse effects.

*Phaeochromocytoma (tumour of the adrenal glands) and uncontrolled hyperthyroidism:* NRT should be used with caution in patients with these conditions (due to the nicotine causing the release of catecholamines).

*Lung Disease:* Patients with obstructive lung disease may find use of the inhalator difficult. Nicotine gum, patch or sublingual tablet may be preferable. Nicorette inhalator should be used with caution in patients with chronic throat disease and bronchospastic disease.

*Interactions between psychotropic medication, smoking and stopping smoking:* Tobacco smoke interacts with medicines commonly prescribed for people with mental health problems. These interactions are caused by the components in the smoke (polycyclic aromatic hydrocarbons) and not the nicotine. Detailed guidance on prescribing is provided at the end of this document.

## NICOTINE WITHDRAWAL SYMPTOMS

Withdrawal symptoms typically begin within the first 24 hours and can include the following:

- craving for tobacco
- depressed mood
- insomnia
- irritability,frustration or anger
- anxiety
- difficulty in concentration
- restlessness
- decreased heart rate
- increased appetite or weight gain

## INFORMED CONSENT

The patient's informed consent must be obtained before treatment can commence and this should be recorded in the patient record as normal practice.

## DETAILS OF RECORD KEEPING

The Stop Smoking Practitioner and other staff involved will record the consultation, treatment plan and behavioural management in the patient record**.**

## DISCHARGE/LEAVE

Prior to a patient leaving the ward a check on whether they intend to smoke should be made. If a patient is to resume smoking then no supply is given on discharge. If a patient has stopped smoking and wants to continue with treatment then at least 7 days of medication is supplied on discharge.

The discharge documentation to primary care must contain details of the stop smoking treatment. The patient may be referred to the local Stop Smoking Service for follow up.

## CHOICE OF STOP SMOKING

## MEDICATION

All of the commercially available forms of NRT (transdermal patch, gum, lozenge, inhalator, mouthspray, sublingual tablets and nasal spray) will be available if recommended by the trained Stop Smoking Practitioner. Varenicline and Bupropion, as per NHS Somerset Prescribing Formulary, are effective as part of a strategy to promote smoking cessation but are not routinely offered to mental health inpatients due to possible neuropsychiatric side effects but are available if clinically appropriate.

## STOCK OF NRT

Inpatient units should maintain a stock of the NRT products listed below. NRT must be stored in a locked drug cupboard or trolley.

Niquitin CQ Clear Transdermal patch 21mg and 14mg 24 hour patch

Nicorette 2mg Mint gum

Nicorette 2mg Cools Lozenges

Nicorette 15mg Inhalator cartridges

Nicorette Quickmist 1mg oral mouthspray

## DOSAGE AND METHOD OF ADMINISTRATION OF STOP SMOKING MEDICATIONS

Stop Smoking Medications must be prescribed on a patient's prescription chart.

When deciding which therapy to use the options are discussed with the patient taking into account various factors such as nicotine dependence, previous use of products, patient choice, any previous adverse reaction to a product. Other products not listed above may be prescribed on the advice of the ward Stop Smoking Practitioner.

On arrival at an inpatient ward, patients should receive access to NRT within 30 minutes. NRT should be available for as long as is needed and at a sufficient dose and frequency.

**NiQuitin CQ Clear Transdermal patch**

Dose: 21mg, 14mg Patches (24 hour patches)

Administration: 1 patch per day. Remove from adhesive sticker and hold exposed to air for a few seconds. Apply to dry, hair-free skin and hold in place for 20 seconds. Remove patch before applying a fresh patch daily. Apply to a different site each day. Do not re-use the site for 7 days. Do not apply to broken or inflamed skin.

Side effects (>1/10): Site reactions are common in the first few weeks (rash, itching, burning, tingling, numbness, swelling, pain, urticarial) but resolve quickly following removal of the patch. Sleep disturbance (insomnia, abnormal dreams) may occur with the 24 hour patch.

**Nicorette 2mg Mint gum** – Dose: Use one piece every 1-2 hours or when strong cravings occur. Max 15/day. Administration: 1 piece of gum should be chewed briefly, and then parked for a few minutes between the gum and cheek. Chew to refresh and park again. Nicotine is absorbed through the lining of the mouth. Discard after 20 mins. Side Effects (>1/10): Sore mouth or throat, jaw-muscle ache, gastrointestinal discomfort, hiccups, nausea, headache

**Nicorette 2mg Cools lozenge** – Dose: Use one lozenge every 1-2 hours or when strong cravings occur. Max 15/day. Administration: Allow lozenge to dissolve in the mouth. From time to time move the lozenge from one side of the mouth to the other. Do not chew or swallow. Nicotine is absorbed through the lining of the mouth. Lozenge will dissolve in 15 minutes. Side effects (>1/10): Nausea, mouth, throat, tongue irritation.

**Nicorette Inhalator 15mg cartridge** – Dose: Use 3-6 cartridges per day. Max 6 cartridges/day. Administration: Each cartridge provides for 40 minutes intense use ideally in 5 – 10 minute periods. Nicotine is absorbed through the lining of the mouth, not via the lungs. The amount of nicotine from one puff on the cartridge is less than that from a cigarette so more regular may be needed. Side effects (>1/10): Headache, coughing, mouth and throat, tongue irritation

**Nicorette Quickmist 1mg oral mouth** spray – faster onset of action compared with other nicotine products. Dose: 1-2 sprays every 30-60 minutes (up to 4 sprays/ hour) when the urge to smoke occurs or to

prevent cravings. Max 64 sprays/day. Administration: Release one spray into the mouth, avoiding the lips. Do not inhale while spraying. Avoid swallowing for a few seconds after spraying. Prime the spray before first use. Side effects (>1/10): Distortion of taste, headache, hiccups, throat irritation, dry mouth, burning lips, indigestion, nausea

See http://www.ncsct.co.uk/pub_stop-smoking-medications.php http://www.bnf.org/bnf/)for the Summary of Product Characteristicshttp://www.medicines.org.uk/) for individual medicines.

**DRUG INTERACTIONS**

Tobacco smoke contains polycyclic hydrocarbons that induce the hepatic cytochrome enzymes particularly CYP1A2. This causes a more rapid clearance of drugs metabolised by these hepatic enzymes.

Stopping smoking may lead to raised levels of affected drugs, increasing the risk of adverse effects. These drugs need to be monitored and the medication dose reduced as necessary. It can take several days/weeks for the enzyme system to adjust so the effect may not be seen immediately.

Listed below are some of the medications that could be affected by smoking:

- **Clozapine metabolism is increased in smokers. If smokers reduce or stop tobacco consumption it is highly likely their serum levels of clozapine will increase -** toxicity has been observed during tobacco abstinence, and patients being treated with Clozapine therefore need their quit attempt to be monitored closely. Studies indicate that smokers may only need around two-thirds their previous dose of clozapine. Trough plasma levels should be taken before smoking cessation and after 2 weeks or sooner if side effects develop.
- **Antipsychotics** – Olanzapine, chlorpromazine, haloperidol, and fluphenazine – patients stopping or reducing smoking may develop side effects and/or need lower doses.
- **Antidepressants** – fluvoxamine and duloxetine - patients stopping or reducing smoking may develop side effects and/or need lower doses.
- **Benzodiazepines** - patients stopping or reducing smoking may develop side effects - such as sedation, ataxia or confusion -and/or need lower doses.
- **Zolpidem** - patients stopping or reducing smoking may develop side effects - such as sedation or confusion - and/or need lower doses.
- **Theophylline** – smokers may need a reduction of 25 to 33% after a week of stopping smoking.
- **Insulin** – patients stopping or reducing smoking may need less insulin.

NRT and Varenicline have no significant drug interactions. For drug interactions with Bupropion see Table 1

Clinicians need to be alert for service users STARTING to smoke again as this will induce liver enzymes and drug metabolism.

# Smoking Cessation
## Effect on Psychotropic Medication including Clozapine

**Summary**
A guide to the adjustment of dose in patients who stop smoking, e.g. on admission to an inpatient unit.

**Background**
The hydrocarbons in tobacco smoke induce the production or activity of various liver enzymes, in particular cytochrome CYP1A2, an enzyme associated with the metabolism of several psychotropic drugs including **clozapine.** Therefore, when people stop smoking, metabolism of these drugs may decrease and plasma levels will rise. This is particularly the case for **clozapine** where **toxic plasma levels may be reached.**

Note: CYP1A2 activity is affected by hydrocarbons and not by nicotine. Therefore nicotine replacement therapy (NRT) will not affect drug metabolism by this route and there are no known interactions between NRT and drug therapy.

**Box 1: Medicines Most Affected**

| Plasma level of these drugs: | Psychotropic drugs |
|---|---|
| ***Is likely to rise, therefore…***<br><br>a dose reduction may be required. The patient must be monitored for adverse effects and plasma drug levels should be monitored if appropriate | chlorpromazine, fluphenazine, haloperidol, **olanzapine,** duloxetine, fluvoxamine,<br><br>**clozapine – see overleaf.** |
| ***May possibly rise, but…***<br><br>this is not generally found to be clinically significant. If adverse effects occur, consider decreasing dose. | flupentixol, zuclopenthixol, trifluoperazine, mirtazapine, tricyclic antidepressants, lamotrigine, valproate, most benzodiazepines, zolpidem, propranolol |
| ***Is unlikely to rise, therefore…***<br><br>no interaction is expected. However, data is often limited so patients should be monitored for adverse effects. | amisulpride, aripiprazole, quetiapine, risperidone, citalopram, escitalopram, fluoxetine, paroxetine, sertraline, moclobemide, reboxetine, venlafaxine, carbamazepine, chlordiazepoxide.<br><br>(Note – lithium levels may reduce). |

The most significant effects on plasma levels are seen with clozapine and olanzapine where increases of up to 70% and 20% respectively have been reported. For olanzapine patients, a reduction in dose of 2.5 – 5mg may be indicated if adverse effects develop. **For clozapine patients far more drastic dose reductions may be necessary, as described overleaf.**

**Action recommended on admission / assessment – all drugs**
- Ascertain pre-admission smoking status and recent medication compliance.
- Determine possible effect of smoking cessation from the table above.
- Consider adjustment of dose, based on age, hepatic function, emergence of adverse effects and the time delay for drug plasma level changes to occur – usually not within the first 7 days. Continue to monitor for emergence of adverse effects. For clozapine patients see overleaf.
- Ascertain and monitor smoking status on leave / discharge. Readjust dose if indicated.

***For clozapine:***

1. **Review** latest (outpatient) serum clozapine levels, if available, and order a new baseline serum clozapine level as soon as practicable. **(Note – no 'call-out' is required, as dose reduction need not be immediate. Arrange bloods in normal 'office hours').**

2. **Review** side-effects history and, if possible, check against the serum clozapine levels at which they occurred.

3. **Assess** the risk of toxicity that could result from stopping smoking (i.e. if the non-smoker level exceeds 1000ng/ml) by estimating the non-smoking serum clozapine level using the formula below:

$$\text{Serum clozapine}^{(\text{Non-smoker})} = [1.5 \times \text{Serum clozapine}^{(\text{Smoker})}] + 50$$

   **e.g. A *smoking level of 500ng/ml gives a non-smoking level of 800ng/ml***

   **NB** The formula is considered to give a suitably accurate result in approximately 80% of cases. However, in patients with higher smoking clozapine levels or doses, (e.g. above 700ng/ml or above 700mg daily), the CYP1A2 enzyme may have been saturated resulting in much higher rates of metabolism. Greatly increased levels may then occur in these patients when they stop smoking and the formula may be wildly inaccurate.

4. **Set a target** (non-smoking) serum clozapine level, taking into consideration the patient's current condition and clinical response to current dose / level. If indicated, adjust the clozapine dose accordingly. (Note – if compliance has been poor prior to admission, the baseline level may be artificially low. This should be taken into consideration).

| **Box 2: Clozapine dose-adjustment worked example** |
|---|
| • *Smoker admitted on clozapine 600mg daily and serum level found to be 480ng/ml.* |
| • *Compliant with medication but clinically unwell on this dose and considered to need a higher serum level.* |
| • *Estimated serum level on cessation of smoking is (1.5 x 480) + 50 = 770ng/ml.* |
| • *If clinician considers that a target serum level of 770ng/ml is appropriate then no adjustment of dose may be necessary.* |
| • *However, if it is felt that the target level should be in the region of 600ng/ml, then the patient's dose may need reducing to 350mg or 375mg daily* |

5. Necessary reductions in daily dose should normally be made at a rate of approximately 10% per day.

6. If possible, **monitor** serum clozapine level at day 3 and then weekly (until stabilised to target level). Also, pre-discharge level (unless done in previous 48 hours).

7. **Monitor** for adverse effects – bearing in mind that some may take as long as 2 to 3 weeks after adjustment of dose to become apparent.

8. **On discharge or leave**, reassess patient's likelihood to recommence smoking and the potential reduction in serum clozapine level in response. If this occurs it is likely that the clozapine dose will have to be increased.

9. **Post-discharge**, where possible, monitor serum clozapine level once each week, (or fortnightly if total dose change was less than 20%), until stable.

**References and further reading:**

Bazire S. *Psychotropic Drug Directory 2014.* Warks: Lloyd-Reinhold Communications. 2014

Bleakley S & Taylor D. *The Clozapine* Handbook. 1st Edn. Warks: Lloyd-Reinhold Communications; 2013

Taylor D, Paton, C, & Kapur, S. The Maudsley Prescribing Guidelines in Psychiatry. 12th Edn. London: Wiley-Blackwell; 2015

Pattullo, C, Donovan P & Kubler P. Royal Brisbane & Women's Hospital Prescribing Guidelines 2012. Brisbane: Queensland Health; 2012.

medicines management
Somerset Partnership

## Table 1: Drug interactions with smoking

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 1.3.1 | H2 receptor antagonists | Smoking is not considered to have a clinically significant effect on the pharmacokinetics of cimetidine, famotidine or ranitidine.<br><br>Healing of ulcers is slower in smokers than non-smokers. | Low | None |
| 1.3.3 | Sucralfate | Smoking does not appear to reduce the efficacy of sucralfate. | Nil | None |
| 2.2.2 | Furosemide | Smoking might reduce the diuretic effect of furosemide but any interaction is not expected to be clinically relevant. | Low | None |
| 2.3.2 | Adenosine | Nicotine from nicotine-replacement therapy can enhance the effect of adenosine. Smoking may have a similar effect. | Low | None |
| 2.3.2 | Flecainide | Smoking increases the clearance of flecainide. Smokers appear to need higher doses of flecainide, compared with non-smokers. | Low | Be alert for dose-related adverse effects of flecainide such as dizziness and visual disturbances. If adverse effects occur, reduce the dose as necessary. |
| 2.3.2 | Lidocaine | Smoking reduces the bioavailability of oral, but not parenteral, lidocaine. Lidocaine is not used orally; this interaction is of no clinical relevance. | Nil | None |
| 2.3.2 | Mexiletine | Mexiletine is metabolised partly via CYP1A2 and its half-life may be reduced in smokers compared to non-smokers. The dose of mexiletine is titrated according to response. | Low | Be alert for adverse effects of mexiletine (e.g. nausea, tremor, hypertension) and reduce the dose as necessary. |
| 2.4 | Beta-blockers | Smoking opposes the beneficial effects of beta-blockers on blood pressure and heart rate. This is a pharmacodynamic rather than a pharmacokinetic interaction.<br><br>Serum propranolol levels may be lower in smokers than non-smokers. | Low | None |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 2.5.2 | Clonidine | Historically, an interaction between adrenergic receptor agonists and smoking was listed in the prescribing information for nicotine replacement products. | Nil | None |
| 2.5.4 | Alpha-adrenoreceptor blocking drugs | Historically, an interaction between adrenergic receptor blockers and smoking was listed in the prescribing information for nicotine replacement products. | Nil | None |
| 2.5.5 | Irbesartan | Smokers may have higher serum irbesartan levels than non-smokers but this is not expected to be clinically relevant. | Low | None |
| 2.6.2 | Nifedipine | Historically, an interaction between nifedipine and smoking was listed in the prescribing information for nicotine replacement products. However, smoking appears not to interact with nifedipine. | Nil | None |
| 2.6.2 | Verapamil | Verapamil may be metabolised partly via CYP1A2. Smokers may have lower serum concentrations of verapamil than non-smokers but this is not expected to be clinically relevant. | Low | None |
| 2.6.4 | Cilostazol | Smokers may have lower serum concentrations of cilostazol than non- smokers but this is not expected to be clinically relevant. | Low | None |
| 2.8.1 | Epoprostenol | Smoking does not appear to affect the efficacy of epoprostenol. | Nil | None |
| 2.8.1 | Heparin | Heparin and low-molecular weight heparins may be slightly less effective in smokers but the difference is probably too small to be of practical importance. | Low | None |
| 2.8.2 | Warfarin | Warfarin is partly metabolised via CYP1A2. An interaction with smoking is not clinically relevant in most patients. The dose of warfarin is adjusted according to a patient's INR (International Normalised Ratio). | Moderate | If a patient taking warfarin stops smoking, their INR might increase so monitor the INR more closely. Advise patients to tell the physician managing their anticoagulant control that they are stopping smoking. |
| 2.9 | Clopidogrel | Some studies suggest the antiplatelet effect of clopidogrel is greater in smokers. A clinically relevant interaction is not established. | Low | None |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 3.1 | Beta-adrenoreceptor agonists | Historically, an interaction between adrenergic receptor agonists and smoking was listed in the prescribing information for nicotine replacement products. | Nil | None |
| 3.1.3 | Theophylline | Theophylline is metabolised principally via CYP1A2. Smokers require higher doses of theophylline than non-smokers due to theophylline's shortened half-life and increased elimination. Some reports suggest smokers may need twice the dose of non-smokers. | High | Monitor plasma theophylline concentrations and adjust the dose of theophylline accordingly. The dose of theophylline may need to be reduced by about one quarter to one third one week after withdrawal. However, it may take several weeks for enzyme induction to dissipate. Monitor theophylline concentration periodically.<br><br>Advise the patient to seek help if they develop signs of theophylline toxicity such as palpitations or nausea. |
| 3.3.2 | Zafirlukast | Clearance of zafirlukast may be increased in smokers but this is not expected to be clinically relevant. | Low | None |
| 3.5.1 | Caffeine | Smoking increases the rate of metabolism of caffeine. | Low | None |
| 4.1.1 | Melatonin | Melatonin is metabolised principally via CYP1A2; plasma levels may be lower in smokers than non-smokers. | Low | Be alert for increased effects of melatonin if a patient stops smoking. |
| 4.1.2 | Benzodiazepines | Smokers taking benzodiazepines may experience less drowsiness than non- smokers. Results from pharmacokinetic studies have been mixed and the interaction, if any exists, may be due to stimulation of the central nervous system from smoking. | Low | Patients may experience an enhanced effect of benzodiazepines after stopping smoking. If so, consider reducing the dose. |
| 4.2.1 | Benperidol | Benperidol is metabolised via liver enzymes, possibly including CYP1A2 but there are no documented cases of an interaction with smoking. | Low | Be alert for increased adverse effects of benperidol. If adverse effects occur, reduce the dose as necessary. |
| 4.2.1 | Chlorpromazine | Chlorpromazine is metabolised principally via CYP1A2. Smokers have lower serum levels of chlorpromazine compared with non-smokers. A case report describes a 25 year old patient with schizophrenia who experienced increased | Moderate | Be alert for increased adverse effects of chlorpromazine (e.g. dizziness, sedation, extra-pyramidal symptoms). If adverse |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| | | adverse effects of chlorpromazine (sedation and dizziness) and increased plasma chlorpromazine levels after abruptly stopping smoking. | | effects occur, reduce the dose as necessary. |
| 4.2.1 | Flupentixol | Flupentixol clearance might be increased by smoking but an interaction is not thought to be clinically relevant. There is no simple correlation between plasma levels of flupentixol and clinical effects. | Low | None |
| 4.2.1 | Fluphenazine | Studies suggest that smokers have increased fluphenazine clearance compared with non-smokers and may require higher doses, but have not shown any difference in behavioural and adverse effects. | Low | Be alert for increased adverse effects of fluphenazine (e.g. drowsiness, extra-pyramidal symptoms). If adverse effects occur, reduce the dose as necessary. |
| 4.2.1 | Haloperidol | Studies suggest that smokers have increased haloperidol clearance compared with non-smokers and may require higher doses, but have not shown any difference in behavioural and adverse effects. | Low | Be alert for increased adverse effects of haloperidol (e.g. drowsiness, extra-pyramidal symptoms). If adverse effects occur, reduce the dose as necessary. |
| 4.2.1 | Perphenazine | Perphenazine is metabolised principally via CYP2D6. A clinically relevant interaction is not expected between perphenazine and smoking. | Nil | None |
| 4.2.1 | Thioridazine | Thioridazine is metabolised principally via CYP2D6 but it has been suggested that clearance of thioridazine may be higher in smokers than non-smokers and that smokers may require higher doses.<br>NB: Thioridazine is no longer marketed in the UK. | Low | Be alert for increased adverse effects of thioridazine (hypotension, arrhythmias, drowsiness, extra-pyramidal symptoms). If adverse effects occur, reduce the dose as necessary. |
| 4.2.1 | Trifluoperazine | Smoking did not have any effect on serum levels of trifluoperazine in a single dose study. There are no reports of an interaction between trifluoperazine and smoking. | Nil | None |
| 4.2.1 | Zuclopenthixol | Zuclopenthixol clearance appears not to be increased by smoking. There is no simple correlation between plasma levels of zuclopenthixol and clinical effects. | Nil | None |
| 4.2.1 | Amisulpride | Smoking appears to have no effect on amisulpride serum levels. | Nil | None |
| 4.2.1 | Aripiprazole | Smoking appears to have no effect on aripiprazole serum levels. | Nil | None |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 4.2.1 | Clozapine | Clozapine is metabolised principally via CYP1A2 and clearance is increased in smokers. Serum clozapine levels are reduced in smokers compared with non- smokers; smokers may need higher doses.<br><br>There have been case reports of adverse effects in patients taking clozapine when they have stopped smoking. | High | Monitor serum drug levels before stopping smoking and one or two weeks after stopping smoking.<br><br>Be alert for increased adverse effects of clozapine. If adverse effects occur, reduce the dose as necessary. |
| 4.2 .1 | Olanzapine | Olanzapine is metabolised principally via CYP1A2 and clearance is increased in smokers. Serum olanzapine levels are reduced in smokers compared with non-smokers; smokers may need higher doses.<br><br>There have been case reports of adverse effects in patients taking olanzapine when they have stopped smoking | High | Be alert for increased adverse effects of olanzapine (e.g. dizziness, sedation, hypotension). If adverse reactions occur, reduce the dose as necessary. |
| 4.2.1 | Paliperidone | Paliperidone pharmacokinetics should not be affected by smoking. | Nil | None |
| 4.2.1 | Quetiapine | Quetiapine is metabolised principally via CYP3A4. Smoking appears to have no effect on quetiapine serum levels. | Nil | None |
| 4.2.1 | Risperidone | Risperidone is metabolised principally via CYP2D6. A clinically relevant interaction is not expected between risperidone and smoking. | Nil | None |
| 4.2.1 | Sertindole | Sertindole clearance might be increased by smoking but an interaction is not thought to be clinically relevant. | Low | None |
| 4.2.1 | Ziprasidone | Ziprasidone is not metabolised via CYP1A2. Smoking appears to have no effect on ziprasidone serum levels.<br><br>NB: Ziprasidone is not marketed in the UK. | Nil | None |
| 4.2.1 | Zotepine | Zotepine is metabolised via CYP1A2 and CYP3A4. Zotepine clearance might be increased by smoking but an interaction is not thought to be clinically relevant. | Low | None |
| 4.2.1 | Asenapine | Asenapine is metabolised via CYP1A2 but appears to be unaffected by smoking. | Low | None |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 4.2.3 | Lithium | There is a theoretical indirect interaction between smoking and lithium. Stopping smoking could lead to increased xanthine levels by reducing metabolism of dietary caffeine. Raised xanthine levels could in turn lead to increased lithium excretion. There are no documented cases of an interaction. | Low | None |
| 4.3.1 | Tricyclic antidepressants | Serum levels of amitriptyline, clomipramine, imipramine and nortriptyline are lower in smokers than in non-smokers, but the concentration of free drug rises, which appears to offset the effects of this interaction. | Low | Be alert for increased adverse effects of the antidepressant. If adverse effects occur, reduce the dose as necessary. |
| 4.3.1 | Trazodone | Smokers may have lower plasma levels of trazodone than non-smokers but a clinically relevant interaction is not expected. | Low | None |
| 4.3.3 | Selective serotonin reuptake inhibitors | Fluvoxamine is the only SSRI expected to interact with smoking.<br><br>Fluvoxamine is metabolised by CYP1A2 and plasma levels may be lower in smokers than non-smokers. Smokers might need higher doses than nonsmokers. | Low | Be alert for increased adverse effects of fluvoxamine. If adverse effects occur, reduce the dose as necessary. |
| 4.3.4 | Agomelatine | Agomelatine is metabolised via CYP1A2; its bioavailability is reduced by smoking. | Low | None |
| 4.3.4 | Duloxetine | Duloxetine is metabolised via CYP2D6 and CYP1A2. Serum levels of duloxetine are lower in smokers, but the difference is not considered to be clinically relevant. | Low | None |
| 4.3.4 | Mirtazapine | Mirtazapine is metabolised via CYP2D6 and CYP1A2. Smoking may affect mirtazapine clearance but is not thought to interact to a clinically relevant extent. | Low | None |
| 4.3.4 | Venlafaxine | Venlafaxine is metabolised principally via CYP2D6. A clinically relevant interaction is not expected between venlafaxine and smoking. | Nil | None |
| 4.7.1 | Paracetamol | Paracetamol is metabolised partly via CYP1A2 but there is no clinically relevant interaction between therapeutic doses of paracetamol and smoking. | Nil | None |
| 4.7.2 | Codeine | Smoking appears not to interact with codeine. | Nil | None |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 4.7.2 | Morphine | Smokers who stop smoking prior to surgery appear to use more morphine postoperatively via patient-controlled analgesia than non-smokers. | Low | None |
| 4.7.2 | Fentanyl | Smokers who stop smoking prior to surgery appear to use more fentanyl postoperatively via patient-controlled analgesia than non-smokers. | Low | None |
| 4.7.2 | Pentazocine | Pentazocine metabolism is increased by smoking. Smokers may need higher doses than non-smokers.<br><br>NB: Pentazocine is not prescribable under the NHS. | Low | None |
| 4.7.2 | Pethidine | Animal data suggest that pethidine metabolism may be increased in smokers but this has not been shown in humans. | Nil | None |
| 4.7.2 | Dextropropoxy-phene | The efficacy of dextropropoxyphene may be reduced in smokers; this appears to be a pharmacodynamic rather than a pharmacokinetic interaction.<br><br>NB: Dextropropoxyphene is not recommended for use in the UK. It is available on a named-patient basis in combination with paracetamol as co-proxamol. | Low | None |
| 4.7.4 | Triptans (5HT1 agonists) | The clearance of frovatriptan and naratriptan is increased by smoking, but not to a clinically relevant extent. Clearance of sumatriptan is unaffected by smoking. | Nil | None |
| 4.7.4 | Clonidine | Historically, an interaction between adrenergic receptor agonists and smoking was listed in the prescribing information for nicotine replacement products. | Nil | None |
| 4.7.4 | Methysergide | The manufacturer of *Deseril* (methysergide) advises against its use in patients who smoke heavily since this may result in enhanced vasoconstriction. | Low | None |
| 4.8.1 | Carbamazepine | Smoking appears to have little or no effect on carbamazepine serum levels. | Nil | None |
| 4.8.1 | Lamotrigine | Smokers may have reduced lamotrigine levels compared with non-smokers but a clinically relevant interaction has not been documented. | Low | None |
| 4.8.1 | Phenobarbital | Smoking appears to have no effect on phenobarbital serum levels. | Nil | None |
| 4.8.1 | Phenytoin | Smoking appears to have no effect on phenytoin serum levels. | Nil | None |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 4.9.1 | Amantadine | Smoking appears to have no effect on amantadine serum levels. | Nil | None |
| 4.9.1 | Rasagiline | Rasagiline is metabolised principally via CYP1A2 but there are no documented reports of an interaction with smoking. | Low | None |
| 4.9.1 | Ropinirole | Ropinirole is metabolised principally via CYP1A2 and smokers may require higher doses than non-smokers. The dose of ropinirole is titrated according to response. | Low | Be alert for increased adverse effects of ropinirole (e.g. nausea, dizziness). If adverse effects occur, reduce the dose as necessary. |
| 4.9.3 | Riluzole | Riluzole is metabolised principally via CYP1A2 but there are no documented cases of an interaction with smoking. | Low | Be alert for increased adverse effects of riluzole (e.g. gastrointestinal effects, weakness). If adverse effects occur, reduce the dose as necessary. |
| 4.10 | Methadone | Methadone is metabolised via isoenzymes including CYP1A2. There has been a case report of respiratory insufficiency and altered mental status when a patient taking methadone for analgesia stopped smoking. | Moderate | Be alert for signs of opioid toxicity and reduce the methadone dose accordingly. |
| 4.11 | Memantine | There is a theoretical interaction between memantine and smoking but it is not expected to be clinically relevant. | Low | None |
| 4.11 | Tacrine | Tacrine is metabolised principally via CYP1A2 and smokers may require higher doses than non-smokers.<br><br>NB: Tacrine is not marketed in the UK; Historically an interaction between smoking and tacrine was included in prescribing information for nicotine replacement products. | Low | Be alert for increased adverse effects of tacrine (e.g. gastrointestinal effects, hepatotoxicity). If adverse effects occur, reduce the dose as necessary. |
| 4.11 | Donepezil | Donepezil is not metabolised via CYP1A2. A clinically relevant interaction is not expected between donepezil and smoking. | Nil | None |
| 4.11 | Galantamine | Galantamine is not metabolised via CYP1A2. A clinically relevant interaction is not expected between galantamine and smoking. | Nil | None |
| 4.11 | Rivastigmine | Rivastigmine is not metabolised via CYP1A2. US prescribing information suggests clearance of rivastigmine may be higher in smokers compared with non-smokers; this is not expected to be clinically relevant. | Low | None |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 5.1.9 | Rifabutin | The volume of distribution of rifabutin might be altered in smokers but any interaction is not expected to be clinically significant. | Low | None |
| 5.4.1 | Quinine | The clearance of quinine appears to be increased in healthy smokers.<br><br>If a patient taking quinine stops smoking, plasma levels of quinine might rise. There is no documented case of an interaction but it should be noted that quinine is highly toxic in overdose.<br><br>Patients with acute falciparum malaria have reduced clearance of quinine and this effect opposes the effect from smoking. | Low | If a patient taking quinine stops smoking, be alert for signs of quinine toxicity (e.g. nausea, tremor, tinnitus, visual disturbance). If toxic effects occur, stop the drug and monitor the patient closely. |
| 6.1.1 | Insulin | Smoking is associated with poor glycaemic control in patients with diabetes. Smokers may require higher doses of insulin but the mechanism of any interaction is unclear.<br><br>NB: Inhaled insulin (*Exubera*, now discontinued in the UK) is contraindicated in smokers as smoking affects the rate and extent of absorption of inhaled insulin. | Moderate | If a patient with insulin-dependent diabetes stops smoking, their dose of insulin may need to be reduced. Advise the patient to be alert for signs of hypoglycaemia and to test their blood glucose more frequently. |
| 6.1.2 | Sulphonylureas | Smoking is associated with poor glycaemic control in patients with diabetes. There is a theoretical interaction between sulphonylureas and smoking but this has not been studied. | Low | If a patient taking a sulphonylurea stops smoking, their dose may need to be altered. Advise the patient to be alert for signs of hypo- and hyperglycaemia. |
| 6.3.2 | Prednisolone | Smoking appears to have no effect on prednisolone serum levels. | Nil | None |
| 6.3.2 | Dexamethasone | Smoking appears to have no effect on dexamethasone serum levels. | Nil | None |
| 6.4 | Raloxifene | Smoking appears to have no effect on the efficacy of raloxifene. | Nil | None |
| 7.3.1 | Oestrogen | Smoking might affect the metabolism of oestrogens but there is insufficient information to recommend dose changes in oestrogen therapy.<br><br>NB: Oestrogen-containing contraceptives are not recommended in heavy smokers or any smokers aged over 35 years of age due to the increased risk of circulatory disorders. | Low | None |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 7.4.1 | Alpha-adrenoreceptor blockers | Historically, an interaction between smoking and adrenergic receptor antagonists was included in the prescribing information for nicotine replacement products. | Nil | None |
| 7.4.2 | Duloxetine | Duloxetine is metabolised via CYP2D6 and CYP1A2. Serum levels of duloxetine are lower in smokers, but the difference is not considered to be clinically relevant. | Low | None |
| 7.4.5 | Papaverine | Smoking may reduce the response to intercavernosal injection of papaverine. It is thought that this is due to the effect of nicotine. | Low | None |
| 8.1.5 | Erlotinib | Plasma levels of erlotinib are decreased in current smokers compared with non-smokers. The clinical effect of reduced plasma levels has not been formally assessed but is likely to be clinically significant. Smokers should be encouraged to stop before erlotinib therapy is initiated.<br>NB: Erlotinib is used in the management of lung cancer. | Moderate | None |
| 8.1.5 | Irinotecan | Clearance of irinotecan is increased in smokers compared with non-smokers but the evidence is insufficient to recommend dose adjustments for smokers. | Low | None |
| 9.1.2 | Vitamin B12 | Historically, an interaction between vitamin B12 and smoking has been included in the prescribing information for nicotine replacement products. | Nil | None |
| 9.5.1 | Cinacalcet | Cinacalcet is metabolised partly via CYP1A2. Dose adjustment may be required if a patient starts or stops smoking. There are no documented cases of an interaction. | Low | Advise the patient to inform their nephrologist when they stop smoking. Monitor parathyroid hormone levels and adjust the dose accordingly. |
| 10.1.1 | NSAIDs | Historically, an interaction between smoking and the NSAIDs phenazone and phenylbutazone was included in the prescribing information for nicotine replacement products.<br>Phenazone and phenylbutazone are metabolised via CYP1A2. In single-dose studies their half-lives were shorter in smokers compared with non-smokers. Theoretically, smokers may require higher doses than non-smokers, but a clinically relevant interaction has not been reported. NB: Phenazone has been discontinued in the UK.<br>Diflunisal clearance might be increased in smokers but any interaction not expected to be clinically relevant.<br>NB: Diflunisal has been discontinued in the UK. | Low | None |

| BNF category | Drug name or class | Nature of interaction | Clinical relevance | Action to take when stopping smoking |
|---|---|---|---|---|
| 10.2.2 | Quinine | The clearance of quinine appears to be increased in healthy smokers.<br><br>If a patient taking quinine stops smoking, plasma levels of quinine might rise but there are no documented cases of an interaction.<br><br>Patients with acute falciparum malaria have reduced clearance of quinine and this effect opposes the effect from smoking. | Low | If a patient taking quinine stops smoking, be alert for increased adverse effects or signs of quinine toxicity (e.g. nausea, tremor, tinnitus, visual disturbance). If adverse or toxic effects occur, reduce the dose or stop the drug as necessary. |
| 11.6 | Alpha-adrenoreceptor agonists | Historically, an interaction between adrenergic receptor agonists and smoking was included in the prescribing information for nicotine replacement products. | Nil | None |
| 14.4 | Hepatitis B vaccine | Smoking is associated with poor response to hepatitis B vaccination. Other risk factors include age over 40 years and obesity. | Low | None |
| 15.1.1 | Propofol | Smokers may require higher doses of propofol to achieve anaesthesia. | Low | Anaesthetists should be aware of their patients' smoking status and past anaesthetic history. |
| 15.1.5 | Neuromuscular blockers | Smokers might need smaller doses of atracurium but higher doses of rocuronium and vecuronium compared with non-smokers. | Low | Anaesthetists should be aware of their patients' smoking status and past anaesthetic history. |
| 15.2 | Lidocaine | Smoking reduces the bioavailability of oral, but not parenteral, lidocaine. Lidocaine is not used orally so this interaction is of no clinical relevance. | Nil | None |
| 15.2 | Ropivacaine | Ropivacaine is metabolised partly via CYP1A2 but is not expected to interact with smoking to a clinically relevant extent. | Low | None |

This list is not exhaustive. It has been compiled to aid medication management in clients who stop smoking and does not include those drugs not felt to pose a practical problem in this situation.

**The information contained in this document is issued on the understanding that it is the best available from the resources used at the time of issue.**

# Nicotine Replacement Therapy for management of temporary nicotine withdrawal

## 1. Clinical Condition

### 1.1 Clinical Condition

Prevention of nicotine withdrawal symptoms in regular smokers who are prevented from smoking, due to an admission to an inpatient ward or to a "Place or Safety".

Common symptoms of nicotine withdrawal often occur within 12-14 hours of stopping smoking and include:

- craving for tobacco
- depressed mood
- insomnia
- irritability, frustration or anger
- anxiety & restlessness
- difficulty in concentration
- decreased heart rate
- increased appetite or weight gain

### 1.2 Inclusion Criteria – Tobacco smokers who meet the following criteria

- Smokers who would like help to stop smoking or would like help to manage nicotine withdrawal and cravings but do not intend to stop smoking long term as per Pathway 1.
- Appropriate consent has been obtained for Nicotine Replacement Therapy (NRT). Refer to the Policy for Consent and Capacity to Consent to Examination and Treatment for further guidance.
- Patients 12 years of age and over who normally smoke cigarettes, or regularly smokes cigars or pipe tobacco or vapes
- Pregnant and lactating women.

### 1.3 Exclusion Criteria

- Allergy or Hypersensitivity to any nicotine patch, gum, lozenge, spray or any other NRT related product or any of the excipients as listed in their Summary of Product Characteristics (SPC) available from http://www.medicines.org.uk
- Significant/widespread skin disorder e.g. psoriasis, dermatitis etc. for the use of patches only.
- Patients under 12 years of age.

### 1.4 Special Considerations

Patients with the below conditions may be treated under the terms of this guidance but special consideration should be given. However, from a harm reduction point of view, tobacco smoking is far more hazardous than NRT. The patients should be closely monitored in addition to discussing with the medical team as soon as practically possible within normal office hours.

- Severe or unstable cardiovascular disease or recent myocardial infarction.
- Recent cerebrovascular accident (stroke).
- Severe Renal or Liver disease.
- Oesophagitis, oral or pharyngeal inflammation, gastritis or peptic ulcers, oral NRT products only.
- Uncontrolled hyperthyroidism.
- *Diabetes Mellitus* – see below
  [Patients with diabetes mellitus may be treated under the terms of this guidance but as blood glucose levels may be more variable when stopping smoking, the patient's blood glucose should be closely monitored with the patients consent. Discuss with the medical team as soon as practically possible within normal office hours]
- *Clozapine* – see below
  [Patients treated with clozapine may be treated under the terms of this guidance but as clozapine levels may be more variable when stopping smoking, the patient's' clozapine plasma levels should be closely monitored with the patients consent. A clozapine plasma level should be arranged as per Appendix D i.e. as soon as practically possible within normal office hours in addition to discussing with the medical team]

### 1.5 Action to be taken if patient is excluded from treatment under this guidance

- The patient may stop smoking, without the aid of NRT; however if withdrawal symptoms are severe, discuss with the medical team.
- Refer patient to the local inpatient Stop Smoking Practitioner for ongoing support as per SmokeFree policy.
- Consider Treatment Pathway 3: for patients who are currently using an e-cigarette and wish to continue to do so, and for patients who choose to use an approved e-cigarette to support abstinence from tobacco smoking - in the SmokeFree policy

### 1.6 Acton to be taken if patient refuses treatment under this guidance

- The patient may stop smoking, without the aid of NRT; Consider Treatment Pathway 2: for patients who decline help to stop smoking or manage withdrawal/cravings: however if withdrawal symptoms are severe, discuss with the medical team.
- Refer patient to the local inpatient Stop Smoking Practitioner for ongoing support as per SmokeFree policy.
- Consider Treatment Pathway 3: for patients who are currently using an e-cigarette and wish to continue to do so, and for patients who choose to

use an approved e-cigarette to support abstinence from tobacco smoking - in the SmokeFree policy

## 2. Location and Staff

### 2.1 Location

Inpatient wards and “Place of Safety”

### 2.2 Staff

Registered Nursing Staff that have successfully completed the level 2/intermediate level training in stop smoking.

The healthcare professional must be willing to be professionally accountable for this work and maintain their skills, knowledge and be working within their competence: as per The Code: Professional standards of practice and behaviour for nurses and midwives.

### 2.3 Continued Training Requirements

Not required unless there are significant changes to the this guidance

The healthcare professional should be aware of any change to the recommendations for the medicines listed.

### 2.4 System for recording names of individuals authorised to administer under the guidance

The healthcare professional is required to complete the Trust Individual Authorisation signed by the authorising ward manager. Copy to be kept by ward manager and sent to Medicines Management Team administrator.

## 3. Description of Treatment

### 3.1 Name of products

- Niquitin CQ Clear Transdermal patch releasing 21mg in 24 hours
- Niquitin CQ Clear Transdermal patch releasing 14mg in 24 hours
- Nicorette 2mg Mint gum
- Nicorette 2mg Cools Lozenges
- Nicorette 15mg Inhalator cartridges
- Nicorette Quickmist 1mg oral mouth spray

### 3.2 Mode of Action

- Patches – Nicotine is absorbed transdermally from the patch over the course of 24 hours.
- Gum – “Chew and Park” method gum which when chewed will release nicotine, which is absorbed through the lining of the mouth.
- Lozenge – Contains a resin, which when sucked allows a slow release of nicotine, which is absorbed through the lining of the mouth.

- Inhalator – Drawing air through the mouthpiece allows the nicotine to be vaporised and absorbed through the lining of the mouth, minimal nicotine reaches the lungs.
- Mouth spray – Spray directly into the mouth, the nicotine is absorbed through the lining of the mouth

**3.3 Legal Status**

GSL (General Sales List)

**3.4 Criteria for determining dose or combination**

- A 14mg patch should be used for those who normally smoke less than 10 cigarettes per day or smoke cigars or a pipe.
- A 21mg patch should be used for those who normally smoke more than 10 cigarettes per day or smoke cigars or a pipe.
- Any strength patch may be combined with one additional non-patch NRT product i.e. combination of patch and inhalator
- A patient may decline the use of a patch but accept the use of a single non-patch NRT product i.e. inhalator only.

**3.5 Dose and frequency of administration**

- Patch – A single patch should be applied to a dry, non-hairy area of skin on the hip, trunk or upper arm and held in position for 10-20 seconds to ensure adhesion. Broken areas of skin must be avoided. Wherever possible, the same area of skin should not be reused for patch application for seven days. The patch is applied once daily, and is designed to remain for 24 hours before being removed. However the patch may be removed before going to bed if sleep disturbances occur.
- Gum – One piece of gum should be chewed briefly, and then parked for a few minutes between the gum and cheek. Chew to refresh and park again. Use one piece every 1-2 hours or when strong cravings occur maximum of 15 pieces per day. Discard after 20minutes.
- Lozenge – One lozenge should be sucked and allowed to completely dissolve in the mouth. From time to time move the lozenge from one side of the mouth to the other. Use one lozenge every 1-2 hours or when strong cravings occur maximum of 15 lozenges per day. Do not chew or swallow.
- Inhalator – One cartridge should be inserted into the mouthpiece and the user draws air through the mouthpiece. One cartridge provides for 40 minutes of intense use ideally in 5 – 10 minute periods. The amount of nicotine from one puff on the cartridge is less than that from a cigarette so more regular puffs may be needed. Maximum of 6 cartridges per day.
- Mouth Spray – Prime the spray before first use. Release one to two spray(s) into the mouth, avoiding the lips every 30-60 minutes (up to 4 sprays/ hour) when the urge to smoke occurs or to prevent cravings. Avoid swallowing for a few seconds after spraying, maximum of 64 Sprays per day

### 3.6 Duration of Treatment

This guidance allows NRT to be administered for up to a maximum of 4 consecutive days only without medical intervention. As soon as is reasonably possible a request to the medical team to prescribe NRT if appropriate should be made.
After the maximum period of 4 consecutive days if further NRT is required this should be prescribed on the Medication Administration Record Chart or electronic prescribing as per the Medicines Policy.

### 3.7 Follow up treatment

- NRT should be removed if significant side effects occur. Refer to the Policy for Consent and Capacity to Consent to Examination and Treatment for further guidance.
- Discuss with the medical team if withdrawal symptoms are severe.
- If further treatment for nicotine withdrawal is required discuss with the medical team to review the patients need for NRT.

### 3.8 Side effects

Note that some effects may be due to smoking cessation rather than the nicotine product – the list below include common side effects (in no particular order) of NRT products. For a full list the refer to the product SPC available from http://www.medicines.org.uk.

- Patch – transient rash, itching, burning, tingling, numbness, swelling, pain and urticaria or hypersensitivity reactions including contact dermatitis and allergic dermatitis.
- Mouth ulceration, dizziness, sleep disturbances, headache and tremor may also be attributed to smoking cessation
- Thirst
- Parathesia of the mouth
- Dry mouth
- Increased salivation
- Hiccups
- Throat irritation
- Gastro-intestinal disturbances
- Nausea and vomiting
- With all possible side effects, implement normal patient observations and document as Adverse Drug Reaction as per Medicines Policy

### 3.9 Interactions

There are no significant interaction between NRT and other medications. However there are several significant interactions between medications and smoking see Appendix D of the Smoke Free Policy.

**4.0 Information and documentation**

**4.1 Advice (including written advice) to be given to patient or carer before or after treatment.**

- Provide a copy of the manufacturers Patient Information Leaflet supplied with the NRT product available from http://www.medicines.org.uk.
- For non-patch NRT products demonstrate appropriate use.
- Appropriate consent has been obtained for NRT. Refer to the Policy for Consent and Capacity to Consent to Examination and Treatment for further guidance.

**4.2 Details of treatment records required.**

- Full record of assessment of patient and supply of NRT product in the patients care notes (Rio) including confirmation that all exclusion criteria were addressed, this should be included in the care plan.
- Appropriate consent has been obtained for NRT, this should be clearly documented .
- Administration of NRT should be clearly documented
    - For those wards/units which are using the Rio Electronic Prescribing.
        - Use the supplementary NRT chart or other approved means
    - For those wards/units which are using a MAR chart.
        - Use the supplementary NRT chart.
- It may not be appropriate for some patients to keep on their possession the mouth spray or inhalator device. A risk assessment should be undertaken if this is the case and clearly documented that these products are stored as per Medicines Policy and available on request.
- It may not be appropriate for some patients to keep on their possession entire strips of gum or lozenge. A risk assessment should be undertaken if this is the case and clearly documented that these products are stored as per Medicines Policy and available on request.

**5.0 Management and Monitoring**

**5.1 Advisory Group approving guidance**

- Medicines Oversight Group
- Medicines in Clinical Practice
- SmokeFree committee

**5.2 Audit arrangement**

- Medicines Management supervision
- Audit of the Medication Administration Record Chart or electronic prescribing
- Clinical audit of patient notes

**5.3 Guidance review date and by whom**

- Every three years or earlier if significant changes are considered
- Medicines Oversight Group